

## **Pennsylvania Public School Employees' Retirement System**

### **Roster of Investment Managers, Advisors, and Consultants**

**As of December 31, 2015**

#### **List of PSERS' Internally Managed Investment Portfolios**

- Bloomberg Commodity Index Overlay
- Gold Fund
- Infrastructure Index
- LIBOR-Plus Short-Term Investment Pool
- MSCI All Country World Index ex. US
- Premium Assistance
- Private Debt Internal Program
- Private Equity Internal Program
- Private Internal Currency Hedge
- Real Estate Internal Program
- REIT Index
- Risk Parity
- S&P 400 Index
- S&P 500 Index
- S&P 600 Index
- S&P MLP Index
- Short-Term Investment Pool
- Treasury Inflation Protection Securities
- U.S. Core Plus Fixed Income
- U.S. Long Term Treasuries

#### **List of PSERS' External Investment Managers, Advisors, and Consultants**

##### **Absolute Return Managers**

- Aeolus Capital Management Ltd.
- AllianceBernstein, LP
- Apollo Aviation Holdings Limited
- Black River Asset Management, LLC
- BlackRock Financial Management, Inc.
- Brevan Howard Asset Management, LLP
- Bridgewater Associates, LP
- Brigade Capital Management
- Capula Investment Management, LLP
- Caspian Capital, LP
- Ellis Lake Capital, LLC
- Nephila Capital, Ltd.
- Oceanwood Capital Management, Ltd.
- One William Street Capital Management, LP
- Pacific Investment Management Company
- Perry Capital, LLC

##### **Publicly-Traded Real Estate Securities Advisors**

- Security Capital Research & Management, Inc.

### **Non-U.S. Equity Managers**

- Acadian Asset Management, LLC
- Baillie Gifford Overseas Ltd.
- BlackRock Financial Management, Inc.
- Fidelity Institutional Asset Management LLC
- Marathon Asset Management Limited
- Oberweis Asset Management, Inc.
- QS Batterymarch Financial Management, Inc.
- Wasatch Advisors, Inc.

### **Commodity Managers**

- Gresham Investment Management, LLC
- Pacific Investment Management Company
- Wellington Management Company, LLP

### **Global Fixed Income Managers**

#### **U.S. Core Plus Fixed Income Managers**

- BlackRock Financial Management, Inc.
- Pugh Capital Management, Inc.
- SEI Investment Management Corporation

#### **U.S. Core Short Duration Fixed Income Managers**

- Radcliffe Capital Management

#### **High Yield Fixed Income Managers**

- Apollo Global Management, LLC
- Avenue Capital Group
- BlackRock Financial Management, Inc.
- Brigade Capital Management
- The Carlyle Group
- Cerberus Business Finance, LLC
- Hayfin Capital Management LLP
- Intermediate Capital Group PLC
- LBC Credit Management, L.P.
- Mariner Investment Group, LLC
- Oaktree Capital Management, LP
- Park Square Capital, LLC
- Sankaty Advisors, LLC
- Summit Partners
- TPG Special Situations Partners
- Värde Partners, Inc.

### **Non-U.S Developed Markets Fixed Income Managers**

- AllianceBernstein, LP

### **Emerging Markets Debt Managers**

- Franklin Templeton Investments
- Stone Harbor Investment Partners, LP

### **Multi-Sector Fixed Income Manager**

- Pacific Investment Management Company

### **Global Inflation-Linked Securities Manager**

- Bridgewater Associates, LP

### **U.S. Treasury Inflation-Protected Securities Manager**

- Black River Asset Management, LLC

### **Master Limited Partnership Managers**

- Atlantic Trust Private Wealth Management
- Harvest Fund Advisors, LLC
- Salient Capital Advisors LLC

### **Passive Currency Hedging Overlay Program**

- Pareto Investment Management, Ltd.

### **Risk Parity Managers**

- AQR Capital Management, LLC
- BlackRock Financial Management, Inc.
- Bridgewater Associates, LP
- D.E. Shaw Investment Management, LLC

### **Real Estate Advisors**

- Charter Oak Advisors, Inc.
- GF Management, Inc.
- L&B Realty Advisors

### **Real Estate Fund Managers**

- Almanac Realty Investors LLC
- Angelo, Gordon & Co., L.P.

- Ares Management LLC
- AvalonBay Capital Management
- Avenue Capital Group
- Bell Partners Inc.
- BlackRock Real Estate
- Brookfield Asset Mgmt Inc.
- Cabot Properties, Inc.
- Carlyle Partners
- C-III Capital Partners LLC
- DRA Advisors, LLC
- Equus Capital Partners, LTD
- Exeter Property Group
- Fortress Investment Group
- Hines U.S. Office Value Added Fund LLC
- JP Morgan Asset Management
- LAI Real Estate Investors, LLC
- Latitude Management Real Estate Investors
- LEM Mezzanine
- O'Connor Capital Partners
- Paramount Group, Inc.
- Prudential Real Estate Investors
- Ramius Capital Group
- Silverpeak Real Estate Partners
- Stockbridge Capital Partners
- Strategic Partners
- The Blackstone Group
- UBS Realty Investors, LLC

#### **Farmland Advisor**

- Prudential Agricultural Group

#### **Venture Capital / Private Equity Fund Managers**

- ABS Ventures
- Actis LLP
- Adams Capital Management, Inc.
- Aisling Capital LLC
- APAX Partners LLP
- Bain Capital Partners LLC
- Baring Private Equity Asia Limited
- Blue Point Capital Partners LLC
- Bridgepoint Capital Ltd
- Capital Group
- Catterton Partners
- Cinven
- Collier Investment Management LTD
- Credit Suisse
- Crestview Advisors LLC
- Cross-Atlantic Capital Partners
- CVC Capital Partners Group
- Denham Capital
- Dubin Clark
- The Energy & Minerals Group
- Equistone Partners Europe Limited
- Evergreen Pacific Partners GP LLC

- First Reserve Corporation
- GoldPoint Partners LLC
- HgCapital
- Huntsman Gay Global Capital LLC
- Incline Management Corp
- IPC Advisors
- Jefferson Partners
- KBL Healthcare
- KRG Capital Partners LLC
- Landmark Partners
- Lexington Capital
- Lindsay Goldberg & Bessemer
- LLR Partners
- Mid-Atlantic Venture Funds
- Milestone Partners
- Morgan Stanley
- New Mountain Investments
- NGP Energy Capital Management
- Novitas Capital
- Odyssey Investment Partners LLC
- Orchid Asia
- PAI Europe
- Palladium Equity Partners
- Partners Group Mgt VI LTD
- Permira
- Platinum Equity Capital Partners
- Psilos Group Investors
- Quadrangle Capital
- Quaker Bio-Ventures, Inc.
- SCP Private Equity Partners
- StarVest Associates
- StepStone Group
- Sterling Partners
- Strategic Partners
- Summit Partners
- TDH, Inc.
- Tenaya Capital
- Trilantic Capital Management LLC
- Wasserstein & Co.

#### **Private Debt Fund Managers**

- Apollo Global Management, LLC
- Arrowhead Mezzanine
- Avenue Capital Group
- Black Diamond Capital Management, LLC
- Cerberus Capital Management, L.P.
- Clearlake Capital Group, L.P.
- Gold Hill Venture Lending 03, LLC
- GoldPoint Partners, LLC
- Oaktree Capital Management LP
- Searchlight Capital Partners, L.P.
- Venor Capital Management LP
- Versa Capital Management, LLC
- Windjammer Capital Investors

**Custodian**

- The Bank of New York Mellon Corporation

**Securities Lending Agent**

- Deutsche Bank

**Investment Accounting Application Service Provider**

- Financial Control Systems, Inc.

**Proxy Voting Agent**

- Glass, Lewis & Co., LLC

**General Investment Consultant**

- Aon Hewitt Investment Consulting (AHIC)

**Private Markets Investment Consultant**

- Portfolio Advisors, LLC

**Real Estate Investment Consultant**

- Courtland Partners, Ltd.

**Hedge Fund Consultant**

- Aksia, LLC